

The Role of International Experience in Residency Training

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ABSTRACT

International rotations offer a number of benefits for residents in anesthesiology. Before departing to an exotic land, preparation is required by the program director and the resident. Both the

preparatory measures and the benefits of such a rotation are discussed.

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"The full moon rises in the eastern night sky above the bushveld. Tonight it's full, and the round orb is shining with a magnificent glow so bright that no other light is needed to guide our path. The clouds float past making eerie shadows reminiscent of the reticulated patterns of giraffes. Our serenade is that of tree frogs and crickets as we reflect on our time in South Africa, and sadly lament that it will soon come to an end."¹

Do not be mistaken, this is not an excerpt from an adventure novel, but rather the reflection of an anesthesiology resident upon finishing one of her rotations. Does this sound unusual? Well, it is.

At Wake Forest University, the Department of Anesthesiology offers an unconventional rotation as part of its training program. Since 1987, 17 residents have completed 1-month rotations to Umtata, South Africa (formerly part of the black homeland, The Republic of Transkei). Through the vision and creativity of the department's former chairman, Francis M. James, III MD, the international rotation was organized as an elective for one to two senior residents each year, providing a learning opportunity rare to US anesthesiology training programs. The rotation originated after Dr. James read an article about an orthopedic surgeon he knew, Chris McConnachie, MD, who left a thriving private practice in North Carolina to provide medical care in rural South Africa.² In later correspondence, McConnachie wrote that anesthesia care was one of the greatest needs in his hospital and that he would welcome any faculty or resident from the WFU anesthesiology program. In response, Dr. James established a rotation that would not only provide anesthesia services to an impoverished area, but also represent a valuable learning experience for residents.

A participant in the Umtata rotation stated, "Not only was the trip literally travel to another world, but it was also a journey for development of cultural awareness, adaptation, independence, and personal and professional growth."¹ Another said, "This has been an incredible

experience. The lessons learned during this short rotation were some of the most intensive of my resident training."³ According to Dr. James, "Those who go never see the world in the same way again. Overall, I think the rotation really helps an individual to grow and to become a broader person. Our residents have come back from Umtata filled with excitement about their experience and have felt that they learned a tremendous amount that would help them be better anesthesiologists in the future. I believe the rotation has also set our department apart from others, making our residency program more competitive and well rounded."⁴

Through working in an underdeveloped country, the residents gain a unique perspective on anesthesia because they learn to function without the sophisticated equipment they rely on in the United States. According to James, "They must learn to use their senses and instincts to monitor patients as was necessary in this country 20-30 years ago. The resident must observe the patient and manually take the blood pressure and pulse. With our modern-day equipment, it's becoming more difficult to convince trainees to observe the patient rather than to continuously watch the monitors with their backs to the operating field!"⁴ Such lessons in vigilance are valuable for residents in US training programs. For example, a mere finger on the pulse can provide valuable information while waiting for the automatic blood pressure device to cycle. Furthermore, in today's context of medical economics, it is helpful knowing that costly equipment is unnecessary for every case. When residents learn that they can safely deliver anesthesia without every invasive line and monitor, they become more careful in selecting the appropriate monitors.

In Africa, residents encounter diseases and public health issues not seen in the United States. For example, tuberculosis of the spine represents the most common cause of paraplegia in the Transkei region, often requiring spinal cord decompression surgery. Small bowel obstruction from intestinal parasites is another frequent problem. Dealing independently with these unfamiliar situations helps the resident to become more self-confident in decision making. There are, however, several local anesthesiologists in Umtata to serve as backup for the residents in situations requiring consultation and supervision. James states, "I also believe these young

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Organizations Providing Short-Term Anesthesia Overseas Practice Opportunities

Organization	Telephone Number
Health Volunteers Overseas, Washington, D.C.	(202) 296-0928
Interplast, Inc.	(650) 962-0123
Operation Smile International	(757) 321-SMILE
ASA Overseas Teaching Program	(847) 825-5586
Doctors Without Borders	(888) 392-0392
Christian Medical and Dental Society	(423) 844-1000

For anyone planning to do medical work abroad, an excellent reference booklet is:

A Guide to Volunteering Overseas, available from Health Volunteers Overseas, c/o Washington Station, PO Box 65157, Washington, DC 20035-5157

physicians learn valuable lessons from interacting with anesthesia personnel from a different background on how to cope in a third world country. They become less rigid and more open-minded to differences. They are more flexible in adapting to situations where they have limited anesthesia supplies and different equipment. They learn they must deal with all types of people.⁴ Learning to adjust to a new environment is also helpful following residency. If one can adjust to providing anesthesia in rural South Africa, one can most likely adjust to practice challenges in Chattanooga, Tennessee, or Spokane, Washington. Furthermore, learning tolerance to differences and cultural sensitivity will be valuable in fostering future professional relationships in the workplace.

Although the Umtata rotation continues to flourish, initiating it was not that easy. The biggest obstacle was finding a way for the residents to receive credit for a rotation in a non-US-accredited program. James, a steadfast advocate of resident training, found the solution: approval from the American Board of Anesthesiology. He wrote a letter to the Board detailing the objectives of the rotation and describing the number and type of cases in Umtata and the credentials of the anesthesiologists there. Furthermore, he wrote an additional letter for each candidate to get prospective approval from the credentials committee for the resident to receive credit. When asked what advice he had to offer other academic departments wanting to set up international rotations, James stated, "Start early. It does take time and effort to set up. Do your research on the area and learn who will be there to supervise. You must clearly show the advantages of the rotation and know what the type and number of cases will be and what the severity of illness is. It is better to have a limited number of sites for a limited number of individuals. This allows for better quality control and ease in maintaining contact with the overseas consultants."⁴

In addition to the preparation a program chairman

Strategy for Planning an International Rotation

Program Chairman

- Obtain ABA site approval
- Obtain credentialing committee approval prospectively for each candidate

Resident

- Send required medical documents to overseas licensing agency
- Obtain US passport (and visa, if necessary)
- Get recommended vaccinations
- Plan travel
- Organize medical equipment and teaching materials

must do, there is also work for the resident. The initial planning should start 6 to 12 months before the rotation. First, one must learn the requirements for medical licensing in the prospective country. Most likely, the overseas medical licensing agencies will require notarized copies of medical school diplomas, national board certifications, and state medical licenses. Usually the overseas consultants can help streamline this process. A valid US passport is also required and possibly a visa to grant entrance into the country of travel. To obtain these documents, candidates need their birth certificate and several recent photographs. For personal safety precautions, one should learn well in advance what vaccinations or medical prophylactic regimens are recommended (tetanus, yellow fever, malaria, hepatitis B, and so forth). This information may be obtained from the Centers for Disease Control by telephone (404-332-4559) or from its Web site (www.cdc.gov/travel). In addition, take prescription medications that may be needed, since they will probably be unavailable in the host country. If planning to drive while abroad, one can obtain an international driver's license from the American Automobile Association. Finally, travel itineraries and arrangements for one's home must be organized prior to departure.

A few additional preparations help to maximize the experience abroad. One should try to learn what medical equipment is available, as well as what equipment or supplies might be needed in the hospital. Often items disposed of in the United States can be salvaged and resterilized for subsequent use. Such items include spinal needles, endotracheal tubes for one lung ventilation, and pediatric masks or breathing circuits. These items may be in limited supply or unavailable in the host country and are usually greatly appreciated. It is also helpful to prepare a seminar or some teaching material that is relevant to the site. Clearly a lecture on transesophageal echocardiography or cardiopulmonary bypass would be of limited value in a hospital that doesn't perform open-heart surgery. A talk is almost always welcomed because current anesthesiology texts and journals rarely reach developing countries. In addition to imparting new information to the audience, conducting a seminar has many benefits for the lecturer: it reinforces a topic for the resident, it is good public speaking practice, it is a professional activity that can be added to one's CV, and it reflects positively on one's home institution. Finally, if

one is taking a general anesthesia textbook for reference while there, plan on leaving it and getting another one back home. In the past, the authors have found that host country physicians treasure Massachusetts General Handbooks and the American Society of Anesthesiologists (ASA) refresher course books.

Overseas work is not for everyone. Although travel to an exotic location may sound exciting, interested individuals must be ready to accept the many inconveniences and discomforts of living in developing countries and the possibility of personal risks. According to James, "Candidates must be mature and responsible individuals with good communication skills. These individuals represent the department, the university, and ultimately the United States. They will be looked upon as Americans first, so they must be good representatives and ambassadors. The individual must also be ready to manage any number of different medical situations."⁴ To do so one must remain flexible in approach and sensitive to the needs of the host program. Things might be different than they were for the last visiting anesthesiology resident because in developing countries conditions quickly change and evolve in response to social and cultural situations. The ASA Overseas Teaching Program provides a good guideline: "To work successfully in a remote program one should, in some ways, forget how it's done back home. Fit into their system now and figure out, from their perspective, why they do what they do. Candidates must not regard themselves as saviors, but as laborers like everyone else working in the same place. Comparisons of superiority and inferiority have no place in cross-cultural experiences, only likenesses and differences should be remembered. Keep an open mind and

above all else, learn to expect the unexpected."⁵ Keeping these principles in mind proves vital to an individual's effectiveness abroad.

Finally, it is important for all doctors to become culturally competent in today's world of travel, communication, and global enterprise. Physicians can't know or understand the cultures of every patient, but awareness of culturally based differences in attitudes and values will contribute in positive ways to patient care and well-being. This concept remains true even for US physicians not planning to travel abroad. At least 2% of all travelers entering the United States each year come for health care, including surgery and anesthesia.⁶ Medicine represents a profession that transcends borders. Illness is multinational and physicians worldwide share the common mission of learning and healing. Working with anesthesiologists and surgeons from around the world, to exchange knowledge and ideas, will advance the practice, quality, and availability of anesthesia. Thanks to the legacy of Francis M. James III, MD, many graduates from the anesthesiology residency program at Wake Forest University know this well.

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